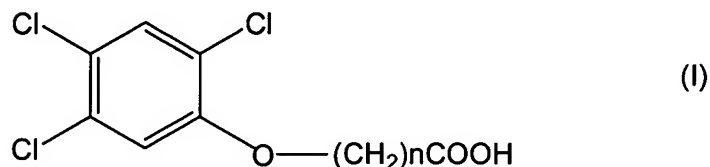


AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

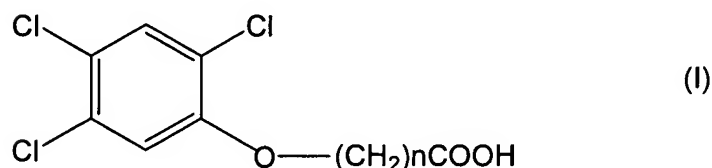
1. (previously presented) A 2,4,5-trichlorophenoxyalkyl carboxylic acid represented by the following formula (I):



where n is an integer of 5 to 10.

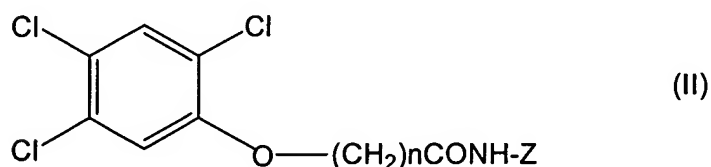
2. (currently amended) An immunoassay for determining an amount of dioxins in a sample comprising:

subjecting the sample and a competitive antigen for dioxins to a competitive reaction with an anti-dioxin antibody for a time and under conditions ~~allowing the formation of an immunocomplex~~ where two immunocomplexes are formed, wherein one immunocomplex is formed between dioxins in the sample and the anti-dioxin antibody and another immunocomplex is formed between the competitive antigen for dioxins and ~~[[,]]~~ the anti-dioxin antibody, wherein the competitive antigen for dioxins is a 2,4,5-trichlorophenoxyalkyl carboxylic acid represented by the following formula (I):



where n is an integer of 1 to 10; and
 determining formation of the immunocomplex between the competitive antigen for dioxins and the anti-dioxin antibody by a competitive immunoassay procedure; and
calculating the amount of dioxins based on the formation of the immunocomplex between the competitive antigen for dioxins and the anti-dioxin antibody.

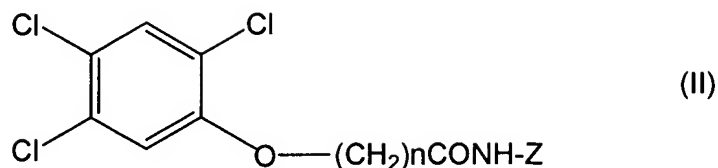
3. (currently amended) A 2,4,5-trichlorophenoxyalkyl amide derivative represented by the following formula (II):



where n is an integer of ~~[[1]]~~ 5 to 10, and Z is an amino acid or a peptide.

4. (currently amended) An immunoassay for determining an amount of dioxins in a sample comprising:

subjecting the sample and a ~~competitive antigen for dioxins~~ 2,4,5-trichlorophenoxyalkyl amide derivative to a competitive reaction with an anti-dioxin antibody for a time and under conditions ~~allowing the formation of an immunocomplex~~
where two immunocomplexes are formed, wherein one immunocomplex is formed between dioxins in the sample and the anti-dioxin antibody and another immunocomplex is formed between ~~the competitive antigen for dioxins~~ 2,4,5-trichlorophenoxyalkyl amide derivative and ~~[[,]]~~ the anti-dioxin antibody, wherein the ~~competitive antigen for dioxins is a 2,4,5-trichlorophenoxyalkyl amide derivative is~~
 represented by the following formula (II):



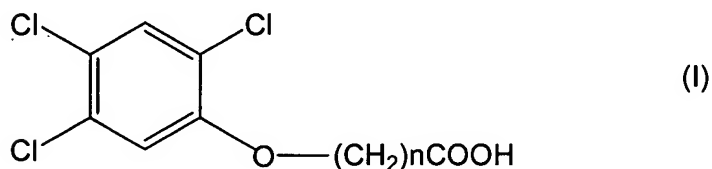
where n is an integer of 1 to 10, and Z is ~~a carrier compound~~ an amino acid or a label peptide; and

determining formation of the immunocomplex between the ~~competitive antigen~~ 2,4,5-trichlorophenoxyalkyl amide derivative and the anti-dioxin antibody by a competitive immunoassay procedure; and

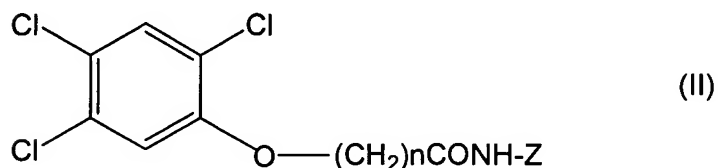
calculating the amount of dioxins based on the formation of the immunocomplex between the 2,4,5-trichlorophenoxyalkyl amide derivative and the anti-dioxin antibody.

5. (currently amended) An immunoassay kit for determining an amount of dioxins in a sample comprising:

a 2,4,5-trichlorophenoxyalkyl carboxylic acid represented by the following formula (I):



where n is an integer of 5 to 10, or a 2,4,5-trichlorophenoxyalkyl amide derivative represented by the following formula (II):



where n is an integer of 1 to 10, and Z is an amino acid or a peptide;

a primary antibody to dioxins;
and a labeled secondary antibody to the primary antibody;
wherein the 2,4,5-trichlorophenoxyalkyl carboxylic acid or 2,4,5-trichlorophenoxyalkyl amide derivative is used as a competitive antigen that reacts specifically with dioxins the anti-dioxin antibody and does not cross react with chlorobenzenes and chlorophenols.

6. (currently amended) The immunoassay kit according to claim 5, wherein the kit comprises 2,4,5-trichlorophenoxyalkyl amide derivative (II) which is immobilized to a solid phase, ~~a primary antibody to dioxins and a labeled secondary antibody to the primary antibody.~~